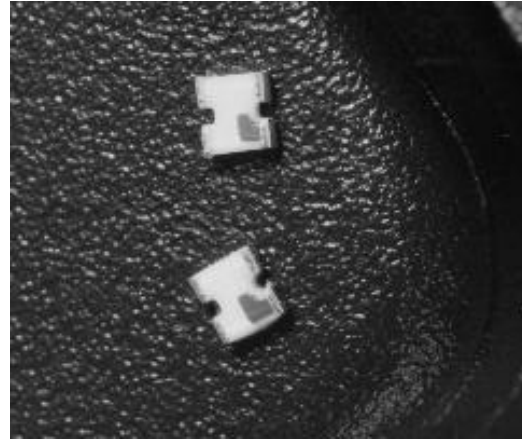


### DESCRIPTION

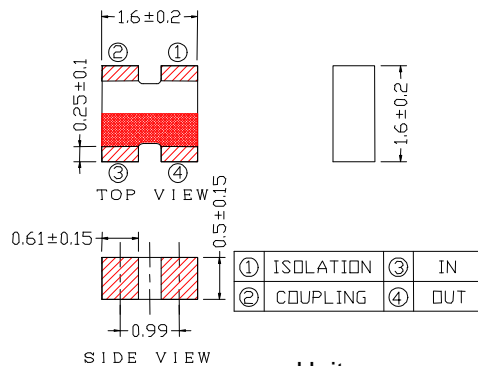
The PTHM1616C is a chip multilayer directional coupler in an ultra-compact 0606 package. Toko's proprietary ceramic multilayer material and process are utilized for superior performance and exceptional reliability. Specific parts have been designed for most common systems including AMPS, GSM, PDC, DCS, DECT, PCS, PHS, and W-LAN.



### FEATURES

- Miniature footprint: 1.6 x 1.6 mm
- Low profile: 0.5 mm
- Low loss: < 0.3 dB typical
- Carrier frequency range: 800 – 2700 MHz
- Available Power: 1 to 3 W
- Operating temperature: - 40° C to + 85° C
- Storage temperature: - 40° C to + 85° C
- Flow and reflow solderable
- Packaged on 6,000 piece reels

### DIMENSIONS

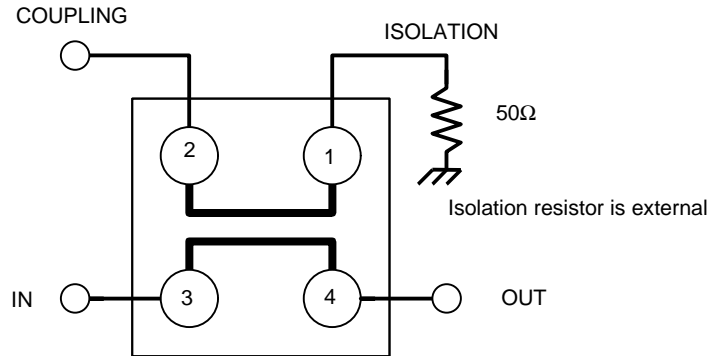


Unit: mm

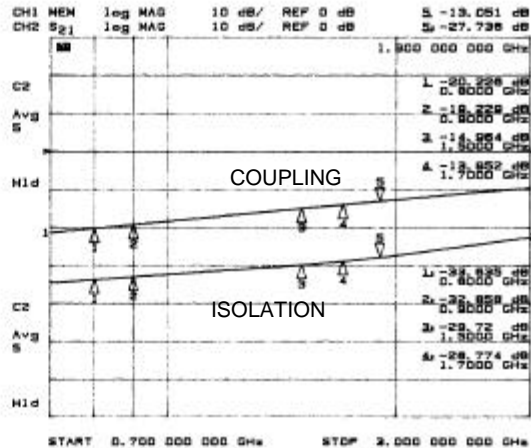
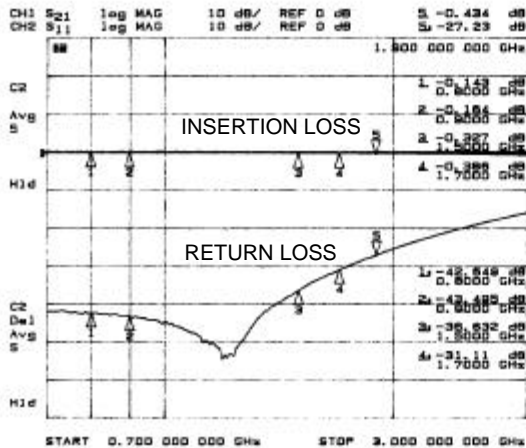
### PART NUMBER TABLE

Toko Part Number	Application	Frequency Range (MHz)	Insertion Loss (dB max)	Return Loss (dB min)	Coupling	Isolation (dB min)	Impedance
PTHM1616C-FR80B	AMPS	823.5 - 848.5	0.15	17	20.5 ± 1.0 dB	27.0	50 Ω
PTHM1616C-FR80C	CDMA	887 - 925	0.25	18	19.8 ± 1.1 dB	26.5	50 Ω
PTHM1616C-FR80D	GSM	880 - 915	0.25	18	19.9 ± 1.1 dB	26.5	50 Ω
PTHM1616C-FR80E	PDC800	893 - 958	0.25	18	19.6 ± 1.2 dB	26.0	50 Ω
PTHM1616C-F1R5B	PDC1500	1420 - 1453	0.30	18	15.7 ± 1.0 dB	23.0	50 Ω
PTHM1616C-F1R7B	DCS	1710 - 1785	0.40	18	14.0 ± 1.1 dB	21.5	50 Ω
PTHM1616C-F1R8A	PCS	1850 - 1910	0.40	18	13.3 ± 1.1 dB	20.0	50 Ω
PTHM1616C-F1R9B	PHS	1895 - 1920	0.40	18	13.2 ± 1.0 dB	20.0	50 Ω
PTHM1616C-F2R4A	W-LAN	2400 - 2500	0.50	14	12.0 ± 2.0 dB	17.0	50 Ω

**EQUIVALENT CIRCUIT**



**TYPICAL CHARACTERISTICS**



The information furnished by TOKO, Inc., is believed to be accurate and reliable. However, TOKO reserves the right to make changes or improvements in the design, specification, or manufacture of its products without further notice. TOKO does not assume any liability arising from the application or use of any product or circuit described herein, nor for infringements of patents or other rights of third parties which may result from the use of its products. No license is granted by implication or otherwise under any patent or patent rights of TOKO, Inc.



**Toko America, Inc.**  
1250 Feehanville Drive, Mt. Prospect, IL 60056  
Tel: 847-297-0070 Fax: 847-699-7864 Web: <http://www.tokoam.com>

**TOKO SALES LOCATIONS**

**Eastern Regional Office**  
Toko America, Inc.  
107 Mill Plain Road  
Danbury, CT 06811  
Tel: (203)748-6871  
Fax: (203)797-1223

**Midwest Regional Office**  
Toko America, Inc.  
1250 Feehanville Drive  
Mount Prospect, IL 60056  
Tel: (847)297-0070  
Fax: (847)699-7864

**Western Regional Office**  
Toko America, Inc.  
2480 North First Street, Suite 260  
San Jose, CA 95131  
Tel: (408)432-8281  
Fax: (408)943-9790